P-3 Orion 04/19/17

Aircraft:
P-3 Orion (See full schedule)
Flight Number:
Science Flight #25-Sea Ice - South Canada Basin (MediumPriority)
Payload Configuration:
OIB Arctic
Nav Data Collected:
No
Total Flight Time:
7.8 hours
Submitted by:
Cate Easmunt on 04/19/17
Flight Segments:

From:	BGTL	**To:**	BGTL
Start:	04/19/17 10:40 Z	**Finish:**	04/19/17 18:30 Z
Flight Time:	7.8 hours		
Log Number:	17P006	**PI:**	Nathan Kurtz
Funding Source:	Bruce Tagg - NASA - SMD - ESD Airborne Science Program		
Purpose of Flight:	Science		

Flight Hour Summary:

	17P006
Flight Hours Approved in SOFRS	333.6
Total Used	299.1
Total Remaining	34.5

17P006 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining
02/24/17	Airworthiness Test Flight	Check	1	1	332.6
02/26/17	Project Test Flight #1	Check	4.9	5.9	327.7
02/27/17	Project Test Flight #2	Check	3	8.9	324.7
03/07/17	Transit Flight	Transit	8.2	17.1	316.5
03/09/17	Science Flight #1 - North Pole Transect	Science	8	25.1	308.5
03/10/17	Science Flight #2 - Laxon Line	Science	8.5	33.6	300
03/11/17 - 03/12/17	Science Flight #3 - Chukchi West Line	Science	8	41.6	292
03/12/17 - 03/13/17	Science Flight #4 - North Beaufort Loop Line	Science	8.1	49.7	283.9
03/14/17 - 03/15/17	Science Flight #5 - East Beaufort Loop Line	Science	8	57.7	275.9
03/20/17	Science Flight #6 - Sea Ice South Basin Transect (to Thule)	Science	8.1	65.8	267.8
03/22/17	Science Flight #7 - North Flux 02	Science	7.9	73.7	259.9
03/23/17	Science Flight #8 - Zig Zag West Line	Science	7.9	81.6	252
03/24/17	Science Flight #9 - CryoVEx Line	Science	5.8	87.4	246.2
03/27/17	Science Flight #10 - Northwest Coastal A Line	Science	7.4	94.8	238.8
03/28/17	Science Flight #11 - North Central Cap 01 Line	Science	7.6	102.4	231.2
03/29/17	Science Flight #12 - Ellesemere Island 01 Line	Science	7.6	110	223.6
03/30/17	Science Flight #13 - Ellesemere South Line	Science	7.9	117.9	215.7

03/31/17	Science Flight #14- Alexander-Petermann Line	Science	6.5	124.4	209.2
04/03/17	Science Flight #15- Zachariae 79N Fram Straight and BGTL ENSB Transit	Science	7.4	131.8	201.8
04/05/17	Science Flight #16 - Svalbard North Line (High Priority)	Science	7	138.8	194.8
04/06/17	Science Flight #17- Svalbard South Mission (High Priority)	Science	8.5	147.3	186.3
04/07/17	Science Flight #18- Combined Zig Zag East Mission and Transit ENSB to BGTL	Science	8.3	155.6	178
04/10/17	Science Flight #19- North Central Gap 3	Science	7.8	163.4	170.2
04/11/17	Science Flight #20- CryoVex 2 (High Priority)	Science	7.8	171.2	162.4
04/12/17	Science Flight #21-Northwest Coastal C	Science	7.2	178.4	155.2
04/13/17	Science Flight #22-North Glaciers 02 Prime (High Priority)	Science	8.2	186.6	147
04/14/17	Science Flight #23-IceSat-2 North/CryoSat-2 SARIn	Science	7	193.6	140
04/17/17	Science Flight #24-Humboldt 01(High Priority)	Science	7.8	201.4	132.2
04/19/17	Science Flight #25-Sea Ice - South Canada Basin (MediumPriority)	Science	7.8	209.2	124.4
04/20/17	Transit Flight to Kangerlussuaq	Transit	3	212.2	121.4
04/21/17	Science Flight #26-Southeast Coastal	Science	8	220.2	113.4
04/22/17	Science Flight #27-Helheim-Kangerd	Science	7.8	228	105.6
04/24/17	Science Flight #28-Geikie 01 (High Priority)	Science	8	236	97.6
04/26/17	Science Flight #29-Devon-Bylot (Medium Priority)	Science	7.9	243.9	89.7
04/28/17	Science Flight #30-Penny 01 (Medium Priority)	Science	6	249.9	83.7
04/29/17	Science Flight #31-Thomas - Jakobshavn 01	Science	8.4	258.3	75.3
05/01/17	Science Flight #32-Thomas - Jakobshavn-Eqip-Store	Science	8.4	266.7	66.9
05/02/17	Science Flight #33-Thomas - ICESat-2 Central	Science	7.9	274.6	59
05/03/17	Science Flight #34-Thomas - Southwest Coastal A	Science	8.3	282.9	50.7
05/05/17	Science Flight #35-Helheim-Kangerdlugssuaq Gap B (High Priority)	Science	8.2	291.1	42.5
05/06/17	Science Flight #36-Helheim-K-EGIG-Summit	Science	8	299.1	34.5

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

Related Science Report:

OIB - P-3 Orion 04/19/17 Science Report

Mission:
OIB
Mission Summary:

Mission: Sea Ice - South Canada Basin (priority: medium)

This mission is designed to enhance the sampling in the large region between the North Basin Transect and the Beaufort-Chukchi Diamond that had been poorly sampled by OIB prior to 2012. In addition to Level 1 Requirements SI1 and SI2, the mission addresses sea ice level 1 projected requirement SIP2 by extending the baseline observations into other regions of the Arctic Basin.

Weather in this portion of the Arctic Ocean has been notoriously cloudy during IceBridge operations in recent years, and 2017 has not been an exception. Our weather models have been predicting a major improvement here for the last several days, as the semi-permanent Beaufort High pressure system reasserts itself after an unusually long absence of several weeks. Weather satellite images from overnight confirmed that today would yield mostly clear skies. We encountered only a few widely separated bands of low clouds and a little surface fog, almost all of which we were able to descend beneath or see through. Overall we estimate a successful data return of 98%.

All instruments performed well.

Data volumes:
Accumulation Radar: 0 Gb
ATM: 76 Gb
CAMBOT: 32 Gb
DMS: 78 Gb
FLIR: 15 Gb
KT19: 10 Mb
MCoRDS: 0 Tb
Narrow Swath ATM: 27 Gb
Snow Radar: 838 Gb

total data collection time: 6.2 hrs

Images:

Map of Sea Ice - South Canada Basin

Map of today's flight.

Read more

Small glacier on Axel Heiberg

A small land-terminating glacier on Canada's Axel Heiberg Island.

Read more

Sea ice lead

A sea ice lead in the process of refreezing, about 100 miles to the west of Prince Patrick Island, near the end of our sea ice data line. Several distinct ice types are visible at various points within the lead. A fairly strong surface wind is blowing from right to left in this image, pushing the newly-formed ice and the floes of older ice to the downwind side of the lead.

Read more

Submitted by:
John Sonntag on 04/19/17

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